


IN THE CLAIMS

All the claims on file are reproduced below:

1. (Currently amended) A system for automating an electronic-commerce transaction using a virtual shopping cart initiated at a host site, comprising:

[[a user profile database that stores data structures necessary to manage a plurality of users' accounts;]]

 a merchant schema database that contains information about schemas used by a plurality of heterogeneous merchants' sites;

a shopping cart manager that creates the virtual shopping cart based on a user's search query, and that monitors the content of the virtual shopping cart; and

a comparison shopping engine that automatically collects and manages information from the plurality of heterogeneous merchants' sites, across multiple independent transaction sessions initiated by the host site, [[from the plurality of heterogeneous merchants' sites,]] based on the user's search query, and that returns a corresponding comparative search result, without requiring the user to leave the host site to visit the plurality of heterogeneous merchants' sites.

2. (Currently amended) The system of claim 1, further [[including]] comprising a shopping coordinator that executes a desired shopping request for at least one item in the virtual shopping cart.


3. (Currently amended) The system of claim 2, further [[including]] comprising a protocol broker module that communicates with at least one of the plurality of heterogeneous merchants' sites using at least one of the schemas in the merchant schema database.

4. (Currently amended) The system of claim 3, further [[including]] comprising a user profile manager that maintains the user profile database and the merchant

schema database.

5. (Currently amended) The system of claim 4, further ~~[[including]]~~ comprising a shopping cart database that stores a plurality of data structures necessary to manage a plurality of shopping carts and items contained in the plurality of shopping carts.

6. (Original) The system of claim 5, wherein the merchant schema database contains information about the plurality of merchants, their communication protocols, and how any one or more of the following functions are implemented for each merchant:

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- add function, that adds an item to the virtual shopping cart;
 - checkout function, that guides the shopper through a check out process;
 - account retrieval feature, that provides account information;
 - confirm order feature, that confirms a shopper's order;
 - order confirmation feature, that receives order confirmation data.

7. (Original) The system of claim 5, wherein the protocol broker parses and analyzes the shopping request related to an item in the virtual shopping cart, to retrieve a corresponding merchant protocol from the merchant schema database.

8. (Original) The system of claim 7, wherein the corresponding merchant protocol is HTTP, and information related to the item in the virtual shopping cart is encoded, at least in part, in HTML.

9. (Currently amended) A shopping agent site for automating an electronic-commerce transaction using a virtual shopping cart initiated at a host site, comprising:

[[a user profile database that stores data structures necessary to manage a plurality of users' accounts;]]

a merchant schema database that contains information about schemas used by a plurality of heterogeneous merchants' sites;

a shopping cart manager that creates the virtual shopping cart based on a user's search query, and that monitors the content of the virtual shopping cart; and

a comparison shopping engine that automatically collects and manages information from the plurality of heterogeneous merchants' sites, across multiple independent transaction sessions initiated by the host site, [[from the plurality of heterogeneous merchants' sites,]] based on the user's search query, and that returns a corresponding comparative search result, without requiring the user to leave the host site to visit the plurality of heterogeneous merchants' sites.

10. (Currently amended) The shopping agent site of claim 9, further [[including]] comprising:

a shopping coordinator that executes a desired shopping request for at least one item in the virtual shopping cart; and

a protocol broker module that communicates with at least one of the plurality of heterogeneous merchants' sites using at least one of the schemas in the merchant schema database.

11. (Currently amended) A method of automating an electronic-commerce transaction using a virtual shopping cart initiated at a host site, comprising:

[[storing a plurality of data structures necessary to manage a plurality of users' accounts;]]

storing information about a plurality of schemas used by a plurality of heterogeneous merchants' sites;

creating the virtual shopping cart based on a user's search query;

monitoring the content of the virtual shopping cart; and

collecting and managing information from the plurality of heterogeneous merchants' sites, across multiple independent transaction sessions initiated by the host site, [[from the plurality of heterogeneous merchants' sites,]] based on the user's search query, and returning a corresponding comparative search result, without requiring the user to leave the host site to visit the plurality of heterogeneous

merchants' sites.

12. (Currently amended) The method of claim 11, further ~~including~~ comprising executing a desired shopping request for at least one item in the virtual shopping cart.

13. (Currently amended) The method of claim 12, further ~~including~~ comprising communicating with at least one of the plurality of heterogeneous merchants' sites using at least one of the schemas in the merchant schema database.

14. (Currently amended) The method of claim 13, further ~~including~~ comprising maintaining the plurality of data structures necessary and the plurality of schemas.

15. (Currently amended) The method of claim 14, further ~~including~~ comprising storing a plurality of data structures necessary to manage a plurality of shopping carts and items contained in the plurality of shopping carts.

16. (Currently amended) The method of claim 15, wherein storing information about the plurality of schemas ~~includes~~ comprises storing information about the plurality of merchants, their communication protocols, and how any one or more of the following functions are implemented for each merchant:

- add function, that adds an item to the virtual shopping cart;
- checkout function, that guides the shopper through a check out process;
- account retrieval feature, that provides account information;
- confirm order feature, that confirms a shopper's order;
- order confirmation feature, that receives order confirmation data.

17. (Currently amended) The method of claim 15, wherein collecting and managing information ~~includes~~ comprises parsing and analyzing the shopping request related to an item in the virtual shopping cart, to retrieve a corresponding merchant protocol.

18. (Currently amended) A computer program product for automating an electronic-commerce transaction using a virtual shopping cart initiated at a host site, comprising:

[[a user profile database that stores data structures necessary to manage a plurality of users' accounts;]]

a merchant schema database that contains information about schemas used by a plurality of heterogeneous merchants' sites;

a shopping cart manager that creates the virtual shopping cart based on a user's search query, and that monitors the content of the virtual shopping cart; and

AD a comparison shopping engine that automatically collects and manages information from the plurality of heterogeneous merchants' sites, across multiple independent transaction sessions initiated by the host site, [[from the plurality of heterogeneous merchants' sites,]] based on the user's search query, and that returns a corresponding comparative search result, without requiring the user to leave the host site to visit the plurality of heterogeneous merchants' sites.

19. (Currently amended) The computer product of claim 18, further [[including]] comprising a shopping coordinator that executes a desired shopping request for at least one item in the virtual shopping cart.

20. (Currently amended) The computer program product of claim 19, further [[including]] comprising a protocol broker module that communicates with at least one of the plurality of heterogeneous merchants' sites using at least one of the schemas in the merchant schema database.

21. (New) The system of claim 1, wherein the user profile database comprises a user ID.

22. (New) The system of claim 21, wherein the user profile database further comprises a user password.

23. (New) The system of claim 21, wherein the user profile database further comprises a user's address.

24. (New) The system of claim 21, wherein the user profile database further comprises a user's credit card information.

25. (New) The system of claim 21, wherein the user profile database further comprises a user's account information.

26. (New) The system of claim 1, wherein the user profile database comprises a user's account information, if any, with the merchants' sites.

27. (New) An electronic-commerce service for automating a transaction using a virtual shopping cart that is initiated at a host site, the service comprising:
storing information about a plurality of schemas used by a plurality of heterogeneous merchants' sites;
creating the virtual shopping cart based on a user's search query;
monitoring the content of the virtual shopping cart; and
collecting and managing information from the plurality of heterogeneous merchants' sites, across multiple independent transaction sessions initiated by the host site, based on the user's search query, and returning a corresponding comparative search result, without requiring the user to leave the host site to visit the plurality of heterogeneous merchants' sites.

28. (New) The electronic-commerce service of claim 27, further comprising executing a desired shopping request for at least one item in the virtual shopping cart.

29. (New) The electronic-commerce service of claim 28, further comprising communicating with at least one of the plurality of heterogeneous merchants' sites using at least one of the schemas in the merchant schema database.

30. (New) The electronic-commerce service of claim 29, further comprising maintaining the plurality of data structures necessary and the plurality of schemas.

31. (New) The electronic-commerce service of claim 30, further comprising storing a plurality of data structures necessary to manage a plurality of shopping carts and items contained in the plurality of shopping carts.

32. (New) The electronic-commerce service of claim 31, wherein storing information about the plurality of schemas comprises storing information about the plurality of merchants, their communication protocols, and how any one or more of the following functions are implemented for each merchant:

- add function, that adds an item to the virtual shopping cart;
- checkout function, that guides the shopper through a check out process;
- account retrieval feature, that provides account information;
- confirm order feature, that confirms a shopper's order;
- order confirmation feature, that receives order confirmation data.


33. (New) The electronic-commerce service of claim 31, wherein collecting and managing information comprises parsing and analyzing the shopping request related to an item in the virtual shopping cart, to retrieve a corresponding merchant protocol.

34. (New) An electronic-commerce service model for automating a transaction using a virtual shopping cart that is initiated at a host site, the service model comprising:

- a storage of information about a plurality of schemas used by a plurality of heterogeneous merchants' sites;
- a management of the virtual shopping cart based on a user's search query;
- a monitoring of the content of the virtual shopping cart; and
- a collection and management of information from the plurality of heterogeneous

merchants' sites, across multiple independent transaction sessions initiated by the host site, based on the user's search query, to return a corresponding comparative search result, without requiring the user to leave the host site to visit the plurality of heterogeneous merchants' sites.

35. (New) The electronic-commerce service model of claim 34, further comprising an execution of a desired shopping request for at least one item in the virtual shopping cart.



36. (New) The electronic-commerce service model of claim 35, further comprising a communication with at least one of the plurality of heterogeneous merchants' sites using at least one of the schemas in the merchant schema database.

37. (New) The electronic-commerce service model of claim 36, further comprising a maintenance of the plurality of data structures necessary and the plurality of schemas.

38. (New) The electronic-commerce service model of claim 37, further comprising a storage of a plurality of data structures necessary to manage a plurality of shopping carts and items contained in the plurality of shopping carts.

39. (New) The electronic-commerce service model of claim 38, wherein the plurality of schemas comprise information about the plurality of merchants, their communication protocols, and how any one or more of the following functions are implemented for each merchant:

- add function, that adds an item to the virtual shopping cart;
- checkout function, that guides the shopper through a check out process;
- account retrieval feature, that provides account information;
- confirm order feature, that confirms a shopper's order;
- order confirmation feature, that receives order confirmation data.

40. (New) The electronic-commerce service model of claim 38, wherein the collection and management of information comprise a parsing and an analysis of the shopping request related to an item in the virtual shopping cart, to retrieve a corresponding merchant protocol.

41. (New) A computer program product having instruction codes for automating an electronic-commerce transaction using a virtual shopping cart initiated at a host site, the computer program product comprising:

a merchant schema database that contains information about schemas used by a plurality of heterogeneous merchants' sites;

a first set of instruction codes for creating the virtual shopping cart based on a user's search query, and for monitoring the content of the virtual shopping cart; and

a second set of instruction codes for automatically collecting and managing information from the plurality of heterogeneous merchants' sites, across multiple independent transaction sessions initiated by the host site, based on the user's search query, and for returning a corresponding comparative search result, without requiring the user to leave the host site to visit the plurality of heterogeneous merchants' sites.

42. (New) The computer product of claim 41, further comprising a third set of instruction codes for executing a desired shopping request for at least one item in the virtual shopping cart.

43. (New) The computer program product of claim 42, further comprising a fourth set of instruction codes for communicating with at least one of the plurality of heterogeneous merchants' sites using at least one of the schemas in the merchant schema database.

44. (New) The computer product of claim 43, wherein the virtual shopping cart comprises diverse goods.

45. (New) The computer product of claim 43, wherein the virtual shopping cart comprises diverse services.

46. (New) The computer product of claim 43, wherein the virtual shopping cart comprises diverse goods and services.
